AMENDMENTS TO THE SPECIFICATION:

Page 29, replace the paragraph beginning on line 24 and bridging pages 29, 30 and 31 with the following amended paragraph:

--First, the thermo-optic phase shifter according to a first embodiment of the present invention will be described. Fig. 1A is a plan view showing the thermo-optic phase shifter in the first embodiment and Fig. 1B is a cross sectional view of the thermo-optic phase shifter along the line A1-A1' shown in Fig. 1A. Figs. 2A to 2D are cross sectional views of the thermo-optic phase shifter showing the manufacturing method of the thermo-optic phase shifter according to the first embodiment of the present invention. As shown in Fig. 1A and 1B, the thermo-optic phase shifter in the first embodiment provides a substrate 1 of silicon of 0.8mm in thickness, for example. A sacrifice layer 2 is provided on the substrate. The sacrifice layer 2 is formed by, for example, phosphor added silica glass (PSG), in which phosphorus is doped into the glass. The thickness of the film of the PSG is, for instance, 5 μm. A clad layer 13 is provided on the sacrifice layer 2. The clad layer 13 has a lower clad layer 3 provided on the sacrifice layer 2, and an upper clad layer 5 provided on the lower clad layer 3. The lower clad layer 3 and the upper clad layer 5 are formed of BPSG, in which boron and phosphorus are doped in the glass. The film thickness of the lower clad layer 3 and the upper clad layer 5 are 14 μm and 15

μm, respectively. It should be noted that the substrate 1 may be formed of a semiconductor or an insulator such as quartz glass other than silicon. Moreover, the sacrifice layer 2 is not limited to the PSG film and may be formed of another material if the etching rate of the material is ~~lager~~ larger than those of the substrate 1 and the clad layers 13, and a selection etching is possible for the substrate 1 and the clad layers 13. The sacrifice layer 2 may be formed of another glass other than the semiconductor or PSG as long as the above requirement is met.--